



То:	<b>Bob Piorkowski</b> Alaska Department of Fish & Game Juneau	
From	Erin Cunningham HDR Alaska 907-644-2115	Project: Hoonah Hydroelectric Project 2010 Fish Sampling
CC:	Brian Glynn Alaska Department of Fish & Game Juneau Area Management Biologist	
Date:	December 23, 2010	Job No: 00000000136446

# Collection Report for ADF&G Fish Resource Permit No. SF2010-116

This memorandum summarizes the fish collection activities conducted in 2010 for the Hoonah Hydroelectric Project. Biologists conducted reconnaissance-level fish sampling on Gartina Creek and Water Supply Creek, both of which are located roughly 5 miles from the community of Hoonah on Chichagof Island. The capture data are included in the attached Excel file and were formatted to follow ADF&G FRP data submission form 5.2 standards.

### **Notification**

ADF&G Area Management Biologist Brian Glynn was notified by phone and email on July 30, 2010.

### **Field Personnel**

Erin Cunningham, Don Bolton, Scott Prevatte, James Brady, and Lynn Spencer

## **Background and Purpose**

The Inside Passage Electrical Cooperative (IPEC) contracted with HDR Alaska, Inc. to assist in the development of a small-scale hydroelectric project to service the community of Hoonah on Chichagof Island, Alaska. An initial task of this work was to perform a field reconnaissance of the proposed project area.

Development of any hydroelectric project requires a careful evaluation of the fisheries aspects of the project. In the summer of 2010, while project engineers began to assess the engineering aspects of both projects, biologists began to assess the fisheries aspects of each project. Biologists conducted three field sampling events from August through November. The August field effort included sampling in both Gartina Creek and Water Supply Creek. Sampling was limited to Gartina Creek in September and November.

## **Methods**

The field team relied primarily on ¼-inch mesh minnow traps baited with commercially processed salmon eggs to document fish species presence. The team also used small hand nets (e.g. aquarium nets), angling gear and visual (ground) observations to record data for fish too large or too small to be captured by minnow traps (to minimize gear bias) and in areas where habitat conditions precluded the effectiveness of traps (i.e., shallow areas). Polarized sunglasses were used to maximize the effectiveness of visual observations.

## Results

Catch diversity was representative of fish species known or assumed to be present in Gartina Creek. The field team confirmed the presence of adult pink, chum, and coho salmon, juvenile coho salmon, cutthroat and rainbow/steelhead trout, Dolly Varden, and Sculpin in Gartina Creek downstream of Gartina Falls. Juvenile coho salmon was the most abundant fish captured downstream from Gartina Falls, followed by Dolly Varden. Resident Dolly Varden was only fish captured or observed upstream of Gartina Falls or in Water Supply Creek.